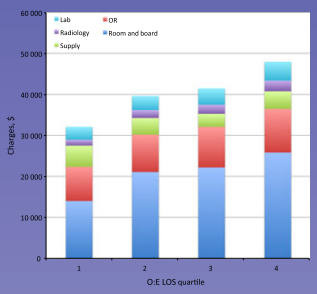
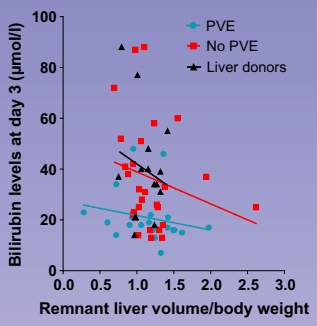
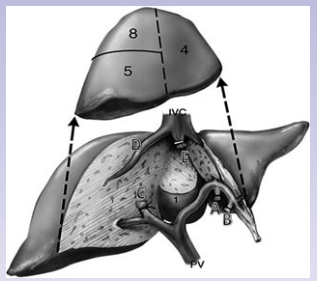
Highlights in this issue



Ejaz *et al.*, p. 955



Meier *et al.*, p. 1009



Lee *et al.*, p. 1025

What is the optimal sequence of imaging in neoadjuvant treatment of CRC liver metastases?

In this issue of *HPB*, *Sturesson et al* report on 29 (16%) patients from a series of 179 who were assessed as having disappearing colorectal liver metastases (DLM) following the administration of neoadjuvant chemotherapy. In these patients, 66 DLM were identified preoperatively and 42 (64%) of these were identified at surgery and treated. Of the 24 tumours that were not identified four were potentially left in situ. One of these four lesions subsequently recurred although the follow up period was not provided. Contrast enhanced ultrasound (US) only detected one lesion that was not identified by intraoperative palpation, inspection, or conventional radiologist led US. It was perhaps not unexpected that both MRI and CT performed poorly in radiological reassessment after chemotherapy for lesions less than 10 mm in size. Although the sensitivity of MRI would appear to be greater than CT, intraoperative assessment was clearly better. Definitions, radiological methodology and chemotherapeutic options are all important considerations to be taken into account in this field. The authors correctly highlight the study deficiencies including the lack of use of diffusion weighted imaging and the inconsistent use of pre chemotherapy MRI. Despite these limitations the messages are clear. Prior to chemotherapy optimal imaging is required in the form of MRI with hepatic specific agents. Recognise that DLM are more likely to occur in patients with small lesions. Post chemotherapy radiological assessment is limited in detecting progression within the liver but can be determined by contrast enhanced CT. Intraoperatively one should plan to resect all disease identified prior to chemotherapy with intraoperative US being performed by those experienced in its use. In the event of undetected DLM, patients should be followed up. It may also be useful to consider whether a flexible approach may be indicated for those with complicated disease. For example, for bilobar disease with small lesions deep within the future liver remnant (FLR), would upfront ablation of lesions within the FLR followed by chemotherapy and subsequent resection reduce the chance of creating a scenario of untreated DLM in a FLR stimulated by growth factors?

Saxon Connor

Should we resect giant hepatocellular carcinomas?

Giant hepatocellular carcinomas (GHCC) defined as having a diameter >10 cm are thankfully relatively uncommon. Liver surgeons will be familiar with the presentation of patients with large tumours but little, if any, symptoms and the management options for such patients can be limited.

In this issue of *HPB*, *Thng and colleagues* from Singapore present their experience with resecting 23 GHCC and compare them with patients undergoing resection for smaller HCC. In this study almost three quarters of patients were aware of an abdominal mass but only a quarter complained of pain. They found that patients presenting with resectable GHCC were more likely to have well preserved liver function than those with small HCC, although we do not know how many patients with GHCC were found to be nonresectable based on their liver function. Resection was perhaps not surprisingly more likely to require an open approach and a significant number required an anterior approach because of difficulty in safely mobilizing the right lobe of the liver. Histological data showed that half the tumours demonstrated microvascular invasion and 40% showed lymphatic invasion. The incidence of satellite lesions was the same as for small HCC. Margin involvement occurred in 13% of patients compared with 2% in small HCC.

On multivariate analysis the presence of satellite lesions and the requirement for perioperative blood transfusion were associated with a poor overall survival outcome but these factors affected patients with both small and GHCC. The overall outcome of patients with GHCC was not significantly different from those with small HCC although this may be a consequence of the relatively small number of patients in the study. Notwithstanding this limitation 50% of patients undergoing resection for GHCC survived at least 3 years. This study shows that if patients have adequate liver function and can tolerate resection then surgery for GHCC is certainly advantageous.

Stephen J. Wigmore

Tracking yet another route of escape

Because extended lymphadenectomy (LA) during pancreaticoduodenectomy (PD) for peri-ampullary cancer does not improve oncologic outcomes, a lesser standard LA (S-LA) has been recommended. It does not include deliberate resection of those nodes behind the pancreatic head between the aorta and inferior vena cava (station 16). Should these nodes be removed, and if so why? For extending survival? For better staging? For an intraoperative hard-stop biopsy as to the futility of PD? *Nappo et al* from Professor Coppola's unit in Rome prospectively evaluated 135 consecutive patients whose PD for peri-ampullary cancer did include resection of these para-aortic lymph nodes (PALN). The incidence of PALN metastases (N16+) was over 11%, not surprising given the known lymphatic drainage pathways for the pancreatic head. This incidence apparently mirrors that for other nodes resected during S-LA. When N16+ for these patients, survival was no better or worse than for all other N1 patients collectively identified. The authors believe this should support continuing with resection, and not abandoning upon a N16+ frozen section. After all, so many patients are ultimately identified on final pathology as being N1. Further, why not N16? Sampling seems easy enough to do as indicated by the authors (16a2, 16b1). But, as also discussed thoroughly by the authors, the oncologic and prognostic implications of N16+ status are difficult to clarify, and what literature we have is discordant. Some studies say stop, the PD will be futile. Others and now *Nappo et al* support sampling N16 PALN and even if positive to press on with PD. I remain content being agnostic to N16 status. After all, isn't it the rare patient with peri-ampullary cancer that will be N0 for S-LA but have isolated positive PALN? Most likely. the objective of PD for cancer comes down to local control. If the enemy has escaped, we know S-LA is sufficient staging for the majority of patients. Perhaps the true prognostic utility of N16+ status lies in pre-operative staging (i.e. EUS-FNA) well before an invasive operation has begun.

Mark Callery